FIG. 1

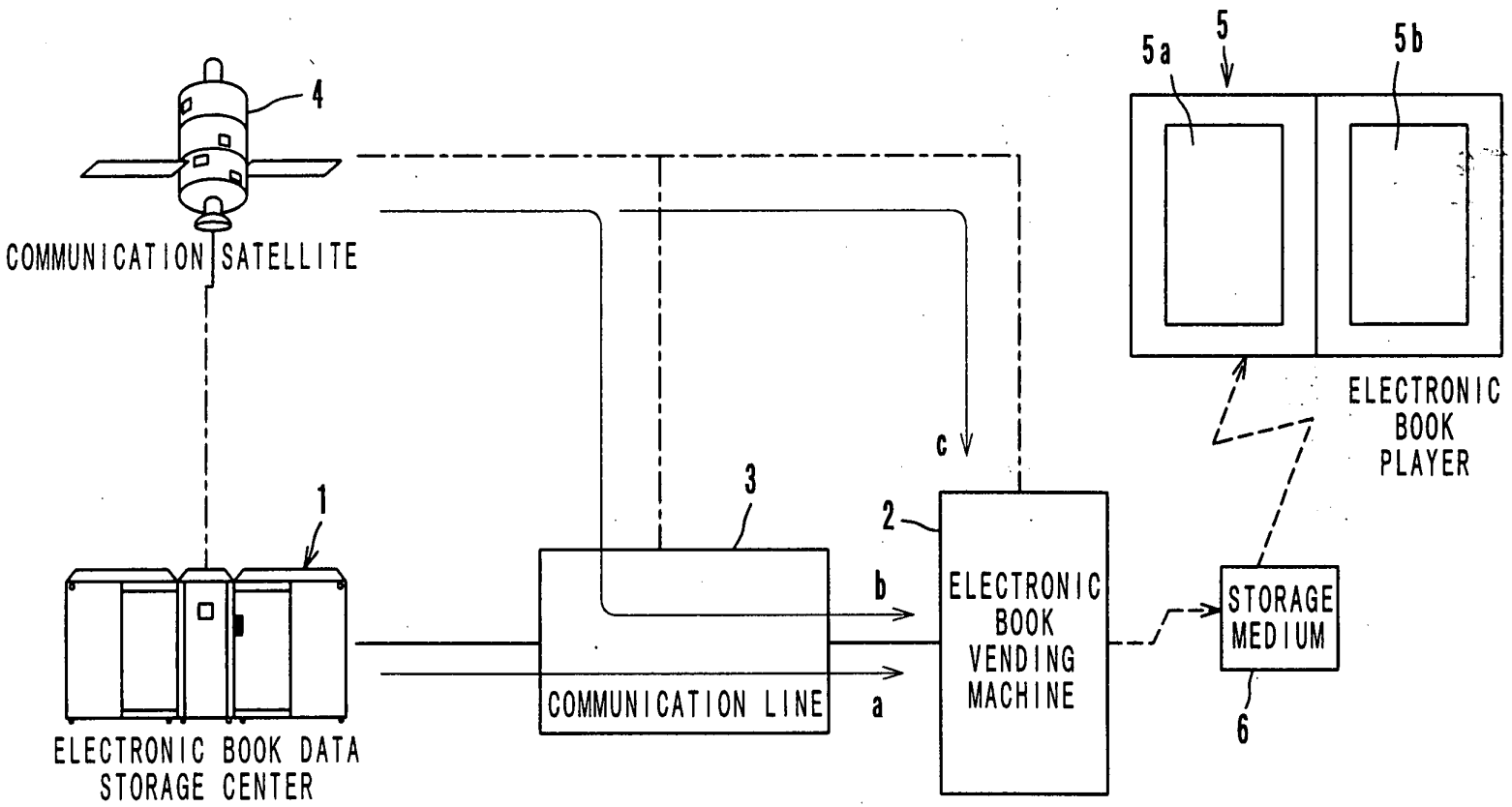

4
COMMUNICATION SATELLITE
5
5a
5b
ELECTRONIC BOOK PLAYER
c
3
2
1
b
a
COMMUNICATION LINE
ELECTRONIC BOOK VENDING MACHINE
STORAGE MEDIUM
6
ELECTRONIC BOOK DATA STORAGE CENTER

FIG. 2

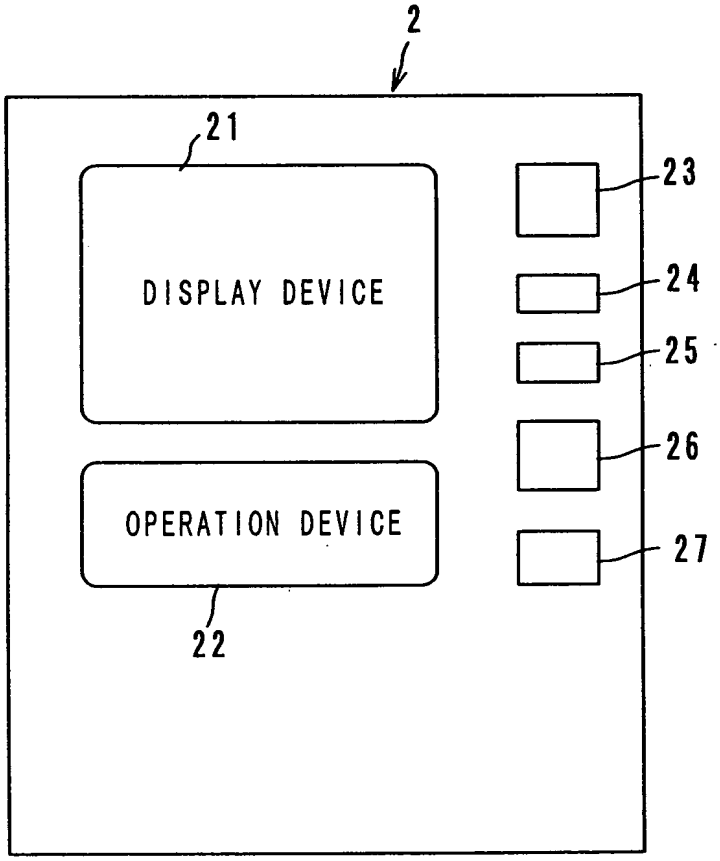


FIG. 3

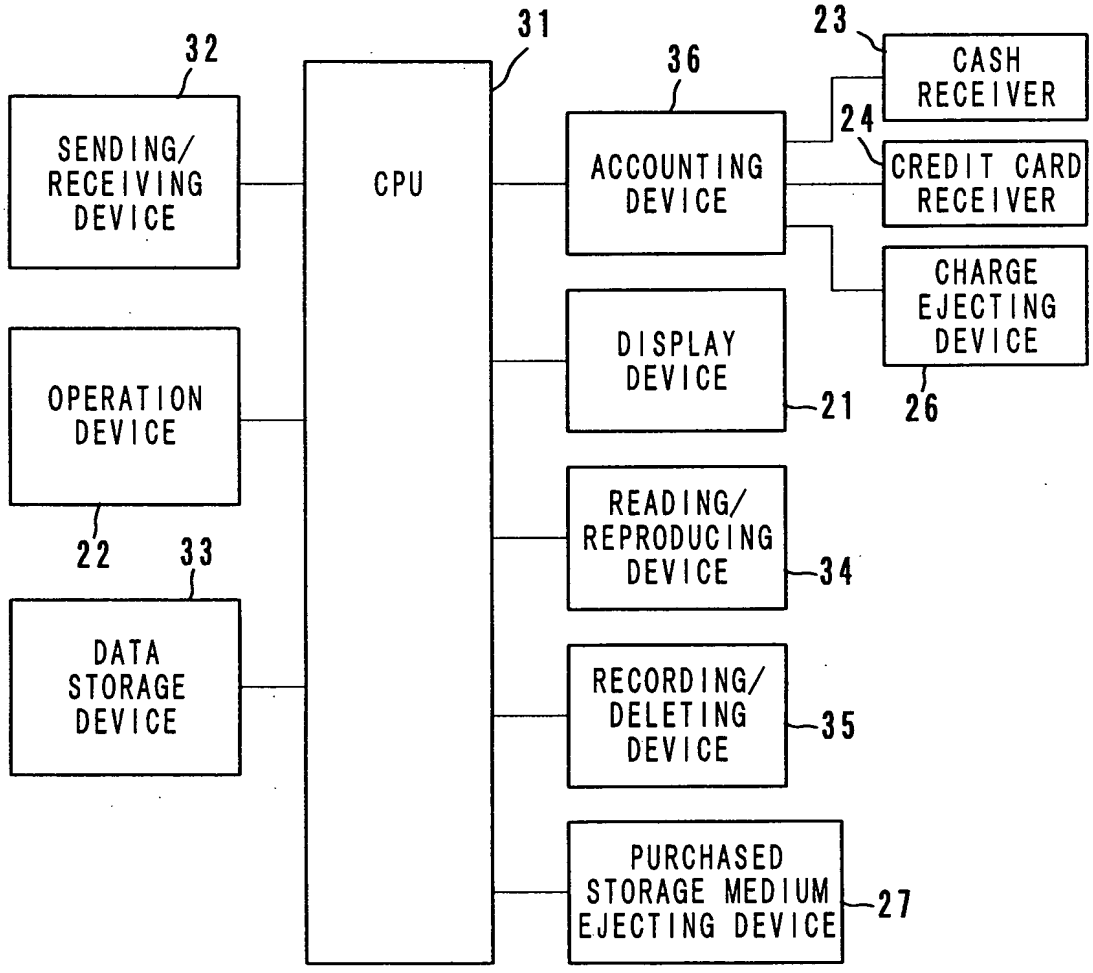

32
SENDING/
RECEIVING
DEVICE
OPERATION
DEVICE
22
33
DATA
STORAGE
DEVICE
CPU
31
36
ACCOUNTING
DEVICE
23
CASH
RECEIVER
24
CREDIT CARD
RECEIVER
CHARGE
EJECTING
DEVICE
26
DISPLAY
DEVICE
21
READING/
REPRODUCING
DEVICE
34
RECORDING/
DELETING
DEVICE
35
PURCHASED
STORAGE MEDIUM
EJECTING DEVICE
27

FIG. 4

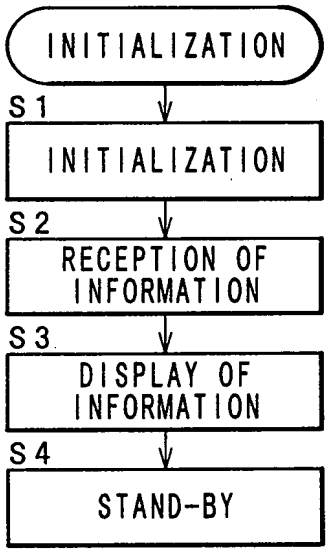

INITIALIZATION
S1
INITIALIZATION
S2
RECEPTION OF INFORMATION
S3
DISPLAY OF INFORMATION
S4
STAND-BY

FIG. 5

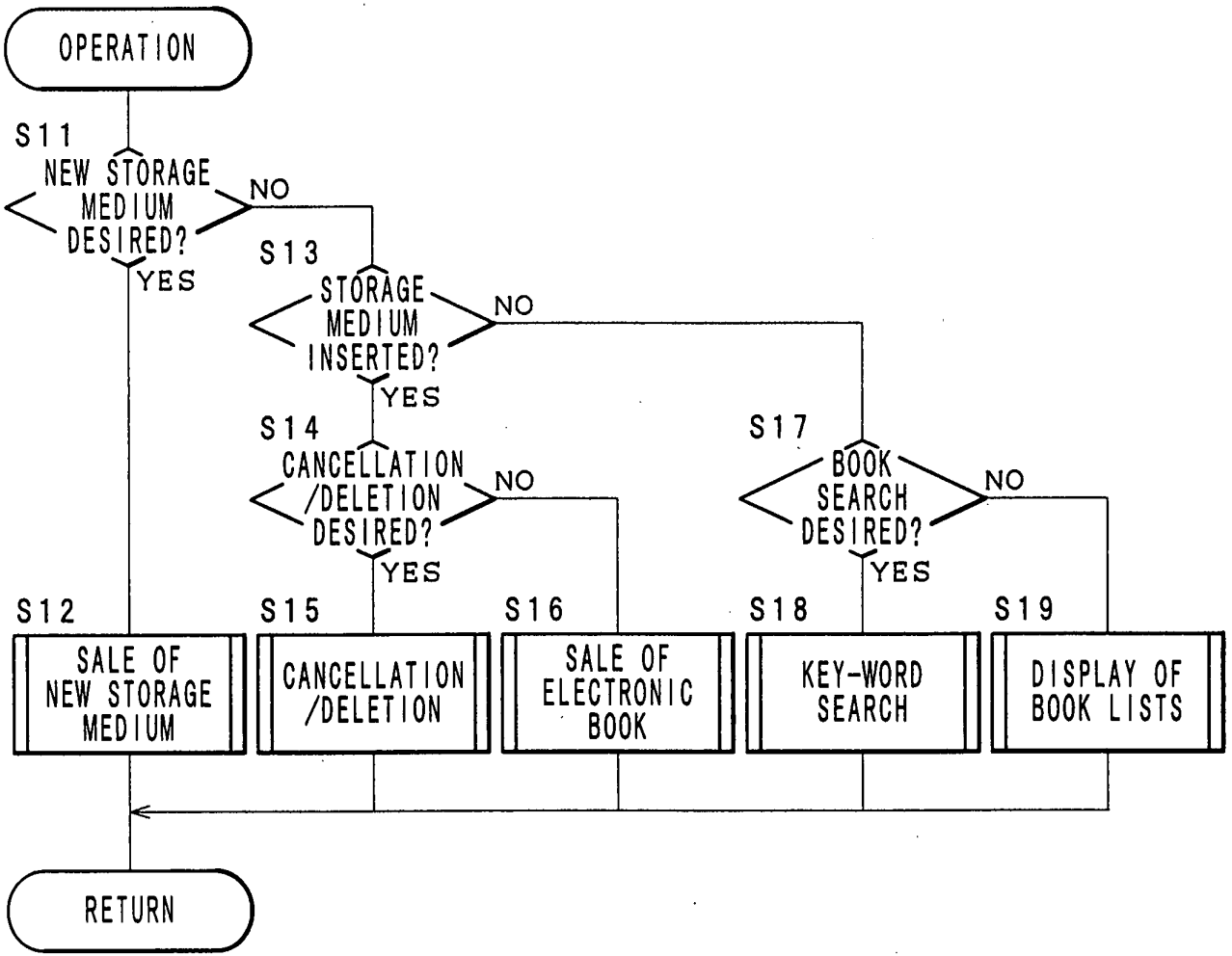

OPERATION
S11
NEW STORAGE MEDIUM DESIRED?
NO
YES
S13
STORAGE MEDIUM INSERTED?
NO
YES
S14
CANCELLATION /DELETION DESIRED?
NO
YES
S17
BOOK SEARCH DESIRED?
NO
YES
S12
SALE OF NEW STORAGE MEDIUM
S15
CANCELLATION /DELETION
S16
SALE OF ELECTRONIC BOOK
S18
KEY-WORD SEARCH
S19
DISPLAY OF BOOK LISTS
RETURN

FIG. 6

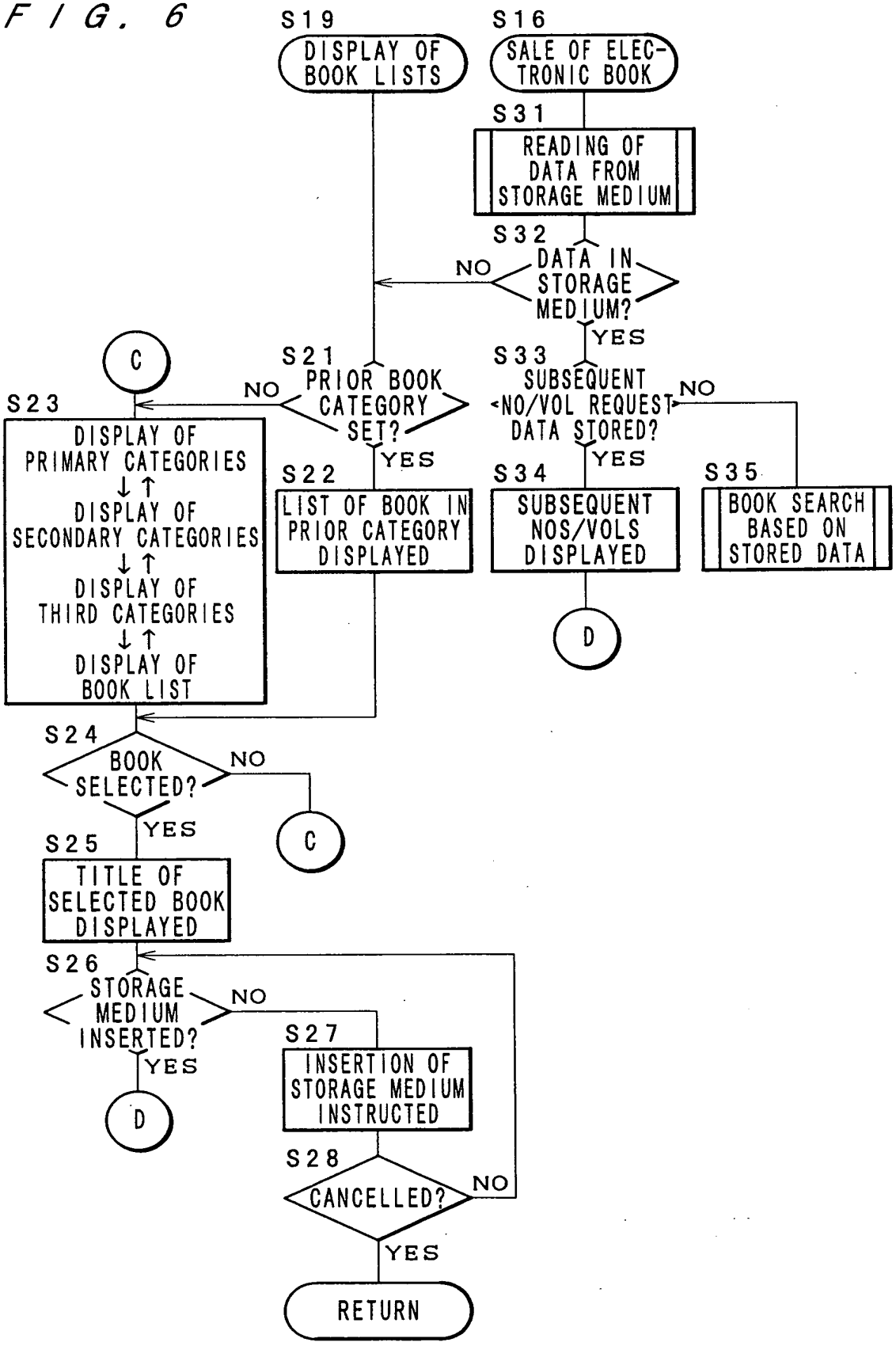

S19
DISPLAY OF BOOK LISTS
S16
SALE OF ELECTRONIC BOOK
S31
READING OF DATA FROM STORAGE MEDIUM
S32
DATA IN STORAGE MEDIUM?
NO
YES
S21
PRIOR BOOK CATEGORY SET?
NO
YES
S33
SUBSEQUENT <NO/VOL REQUEST DATA STORED?
NO
YES
C
S23
DISPLAY OF PRIMARY CATEGORIES
↓↑
DISPLAY OF SECONDARY CATEGORIES
↓↑
DISPLAY OF THIRD CATEGORIES
↓↑
DISPLAY OF BOOK LIST
S22
LIST OF BOOK IN PRIOR CATEGORY DISPLAYED
S34
SUBSEQUENT NOS/VOLS DISPLAYED
S35
BOOK SEARCH BASED ON STORED DATA
D
S24
BOOK SELECTED?
NO
YES
C
S25
TITLE OF SELECTED BOOK DISPLAYED
S26
STORAGE MEDIUM INSERTED?
NO
YES
S27
INSERTION OF STORAGE MEDIUM INSTRUCTED
D
S28
CANCELLED?
NO
YES
RETURN

FIG. 7

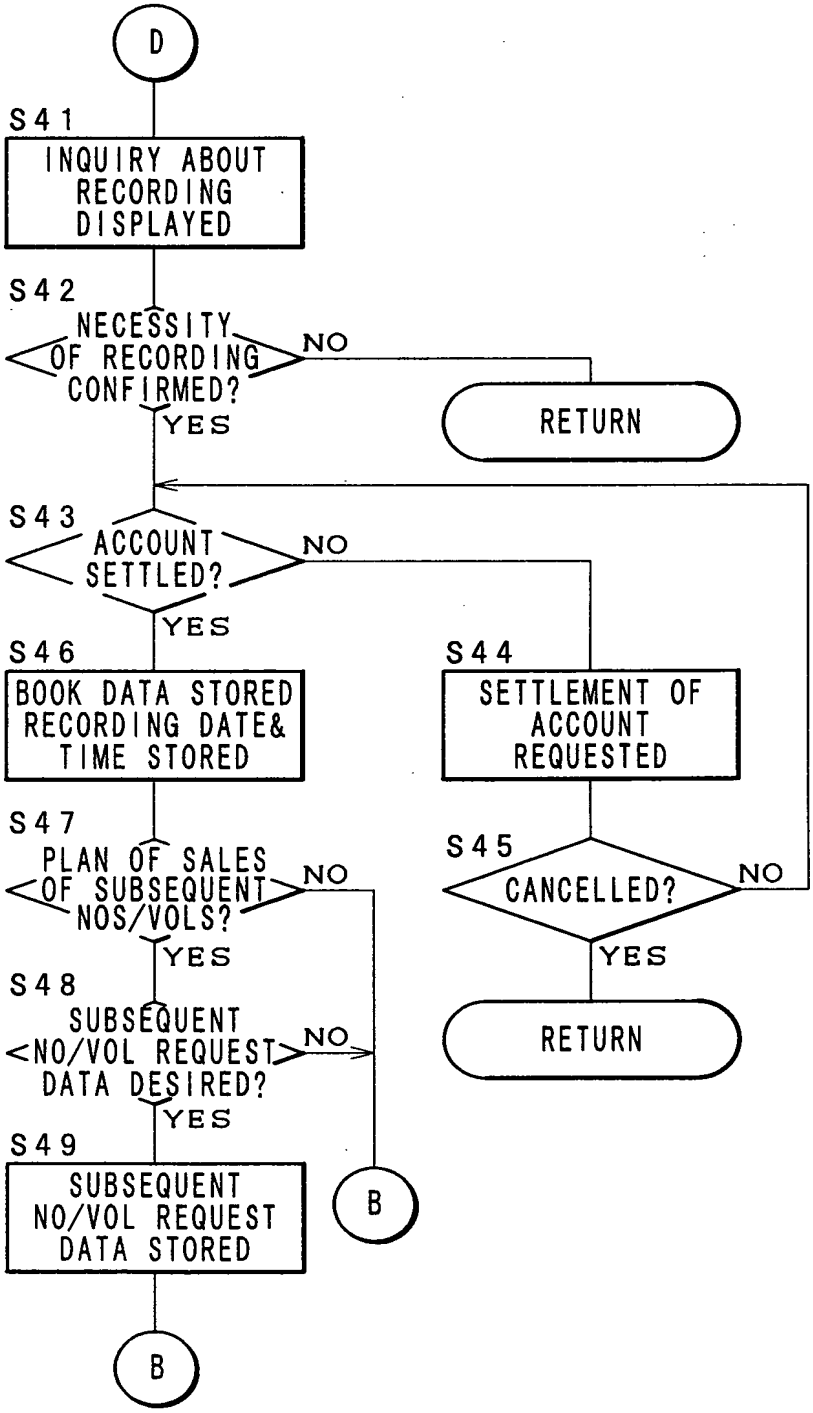

D
S41
INQUIRY ABOUT RECORDING DISPLAYED
S42
NECESSITY OF RECORDING CONFIRMED?
NO
YES
RETURN
S43
ACCOUNT SETTLED?
NO
YES
S46
BOOK DATA STORED RECORDING DATE& TIME STORED
S44
SETTLEMENT OF ACCOUNT REQUESTED
S47
PLAN OF SALES OF SUBSEQUENT NOS/VOLS?
NO
YES
S45
CANCELLED?
NO
YES
RETURN
S48
SUBSEQUENT <NO/VOL REQUEST DATA DESIRED?
NO
YES
S49
SUBSEQUENT NO/VOL REQUEST DATA STORED
B
B

FIG. 8

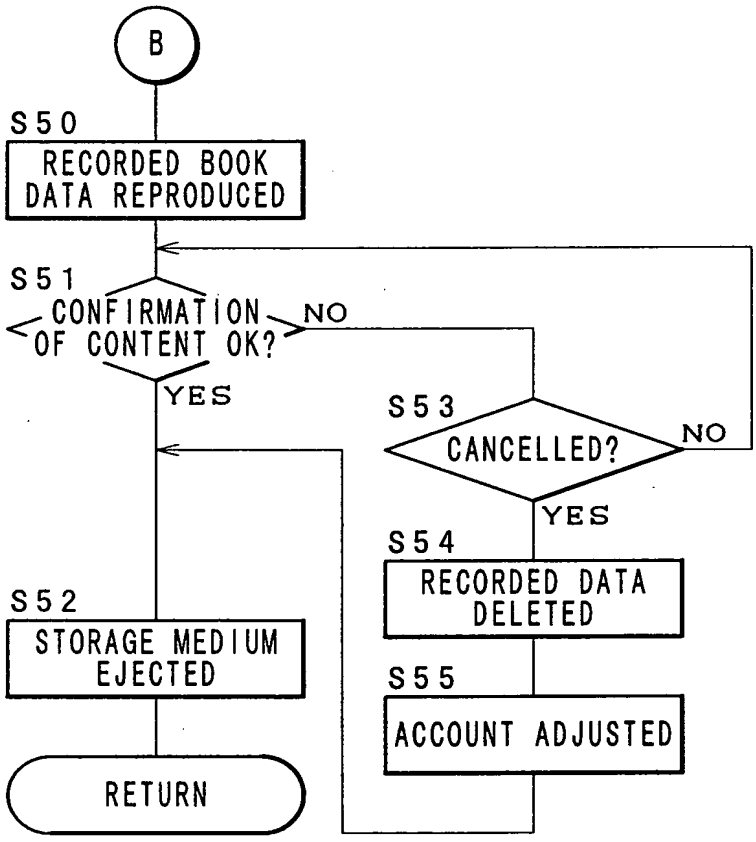

B
S50
RECORDED BOOK DATA REPRODUCED
S51
CONFIRMATION OF CONTENT OK?
NO
YES
S53
CANCELLED?
NO
YES
S54
RECORDED DATA DELETED
S55
ACCOUNT ADJUSTED
S52
STORAGE MEDIUM EJECTED
RETURN

FIG. 9

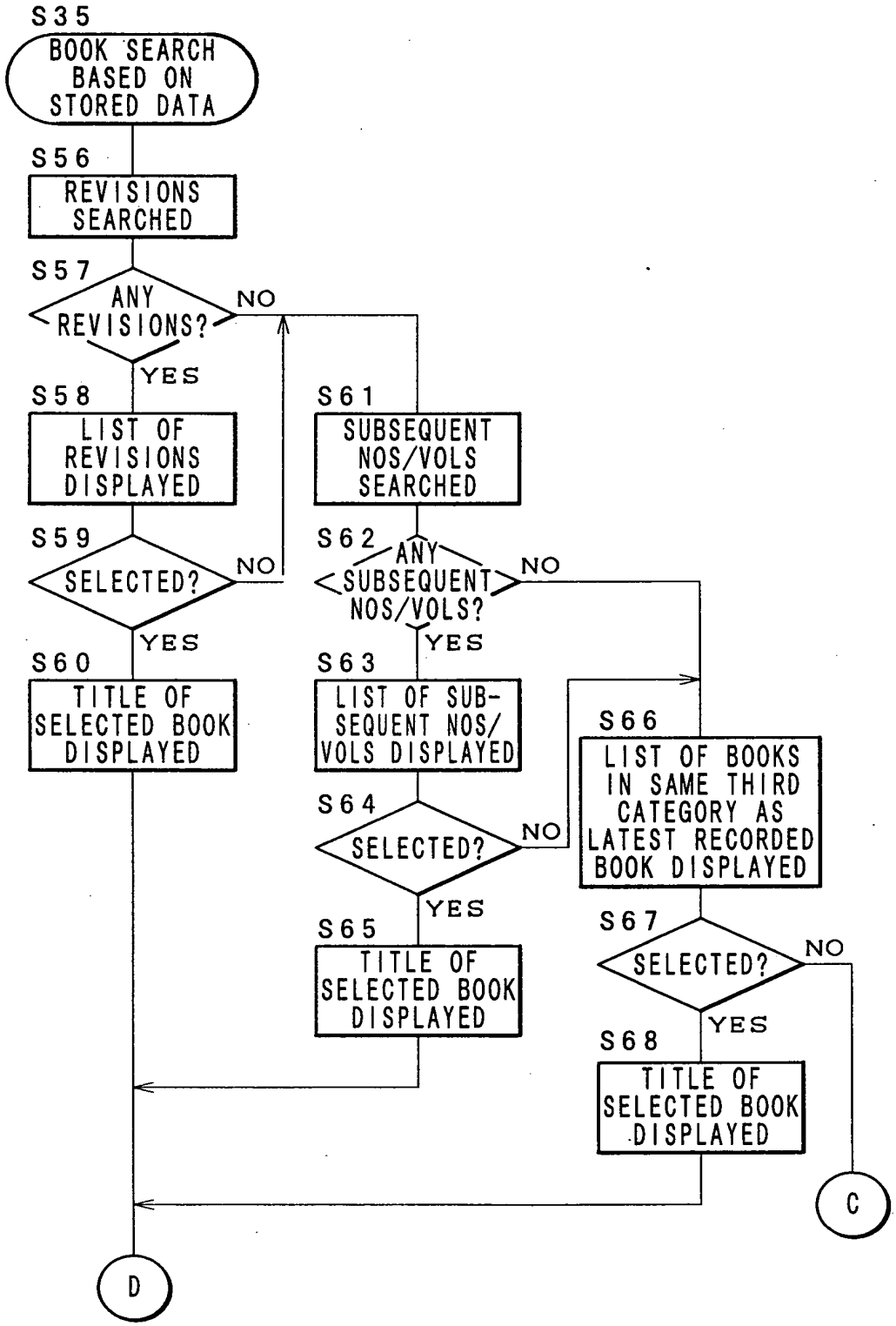

S35
BOOK SEARCH BASED ON STORED DATA
S56
REVISIONS SEARCHED
S57
ANY REVISIONS?
NO
YES
S58
LIST OF REVISIONS DISPLAYED
S59
SELECTED?
NO
YES
S60
TITLE OF SELECTED BOOK DISPLAYED
S61
SUBSEQUENT NOS/VOLS SEARCHED
S62
ANY SUBSEQUENT NOS/VOLS?
NO
YES
S63
LIST OF SUB-SEQUENT NOS/ VOLS DISPLAYED
S64
SELECTED?
NO
YES
S65
TITLE OF SELECTED BOOK DISPLAYED
S66
LIST OF BOOKS IN SAME THIRD CATEGORY AS LATEST RECORDED BOOK DISPLAYED
S67
SELECTED?
NO
YES
S68
TITLE OF SELECTED BOOK DISPLAYED
C
D

FIG. 10

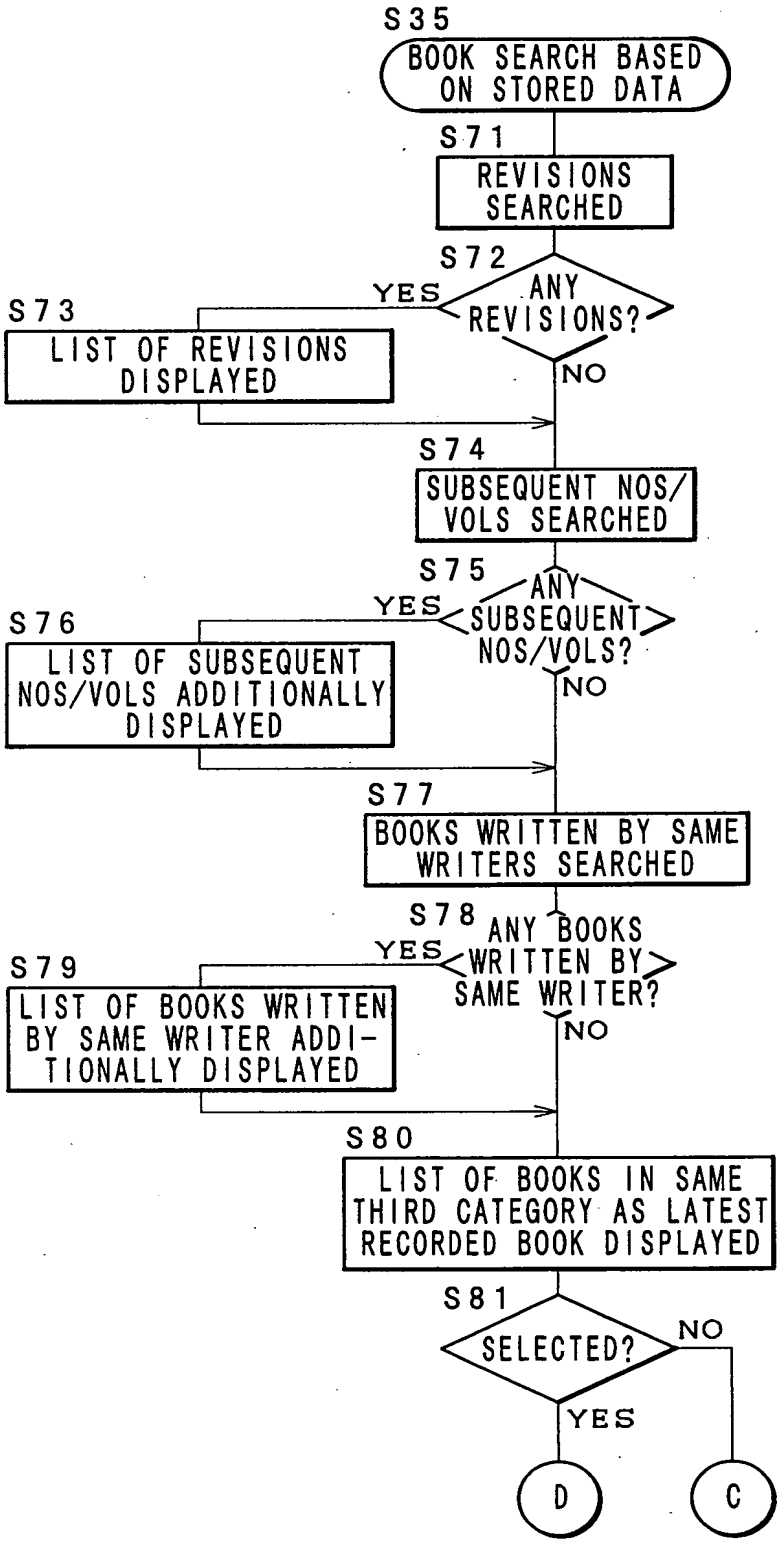

S35
BOOK SEARCH BASED ON STORED DATA
S71
REVISIONS SEARCHED
S72
ANY REVISIONS?
YES
NO
S73
LIST OF REVISIONS DISPLAYED
S74
SUBSEQUENT NOS/VOLS SEARCHED
S75
ANY SUBSEQUENT NOS/VOLS?
YES
NO
S76
LIST OF SUBSEQUENT NOS/VOLS ADDITIONALLY DISPLAYED
S77
BOOKS WRITTEN BY SAME WRITERS SEARCHED
S78
ANY BOOKS WRITTEN BY SAME WRITER?
YES
NO
S79
LIST OF BOOKS WRITTEN BY SAME WRITER ADDITIONALLY DISPLAYED
S80
LIST OF BOOKS IN SAME THIRD CATEGORY AS LATEST RECORDED BOOK DISPLAYED
S81
SELECTED?
NO
YES
D
C

FIG. 11

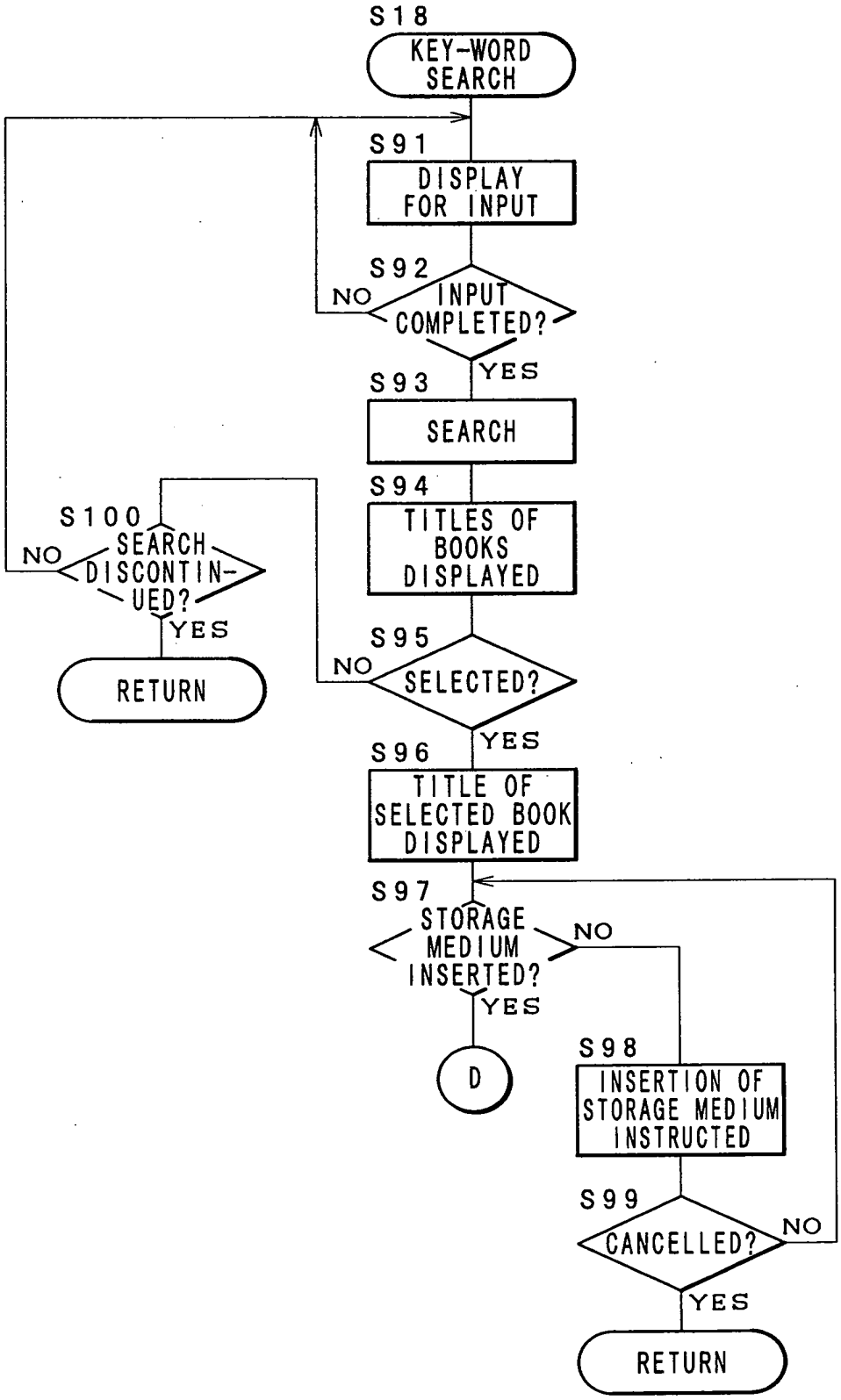

S18
KEY-WORD SEARCH
S91
DISPLAY FOR INPUT
S92
INPUT COMPLETED?
NO
YES
S93
SEARCH
S94
TITLES OF BOOKS DISPLAYED
S95
SELECTED?
NO
YES
S96
TITLE OF SELECTED BOOK DISPLAYED
S97
STORAGE MEDIUM INSERTED?
NO
YES
D
S98
INSERTION OF STORAGE MEDIUM INSTRUCTED
S99
CANCELLED?
NO
YES
RETURN
S100
SEARCH DISCONTIN-UED?
NO
YES
RETURN

FIG. 12

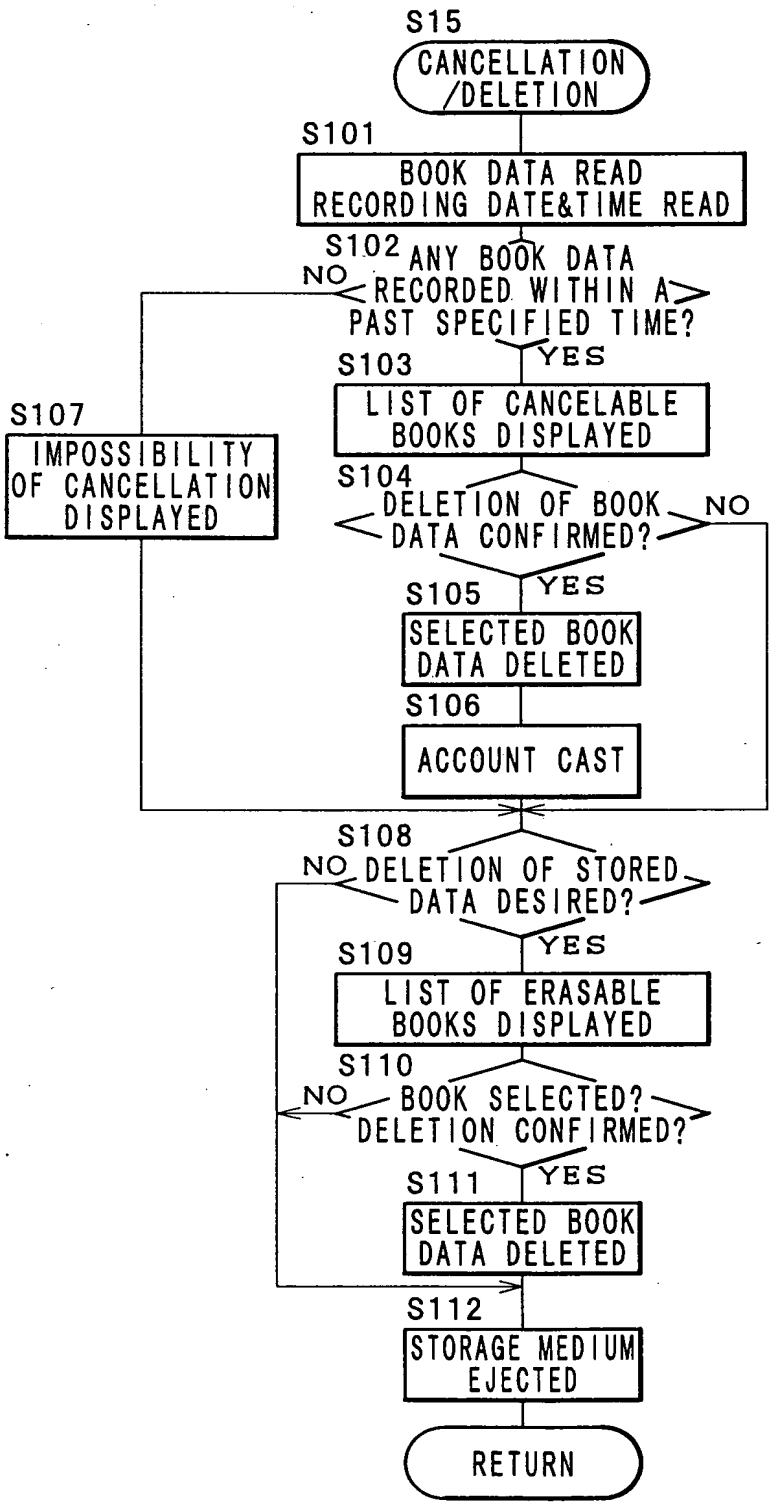

S15
CANCELLATION /DELETION
S101
BOOK DATA READ
RECORDING DATE&TIME READ
S102
ANY BOOK DATA RECORDED WITHIN A PAST SPECIFIED TIME?
NO
YES
S103
LIST OF CANCELABLE BOOKS DISPLAYED
S104
DELETION OF BOOK DATA CONFIRMED?
NO
YES
S105
SELECTED BOOK DATA DELETED
S106
ACCOUNT CAST
S107
IMPOSSIBILITY OF CANCELLATION DISPLAYED
S108
DELETION OF STORED DATA DESIRED?
NO
YES
S109
LIST OF ERASABLE BOOKS DISPLAYED
S110
BOOK SELECTED? DELETION CONFIRMED?
NO
YES
S111
SELECTED BOOK DATA DELETED
S112
STORAGE MEDIUM EJECTED
RETURN

FIG. 13a

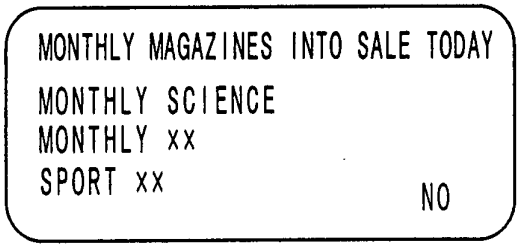


FIG. 13b

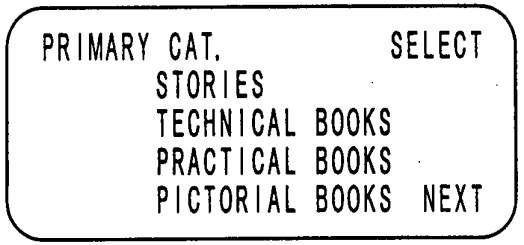


FIG. 13c

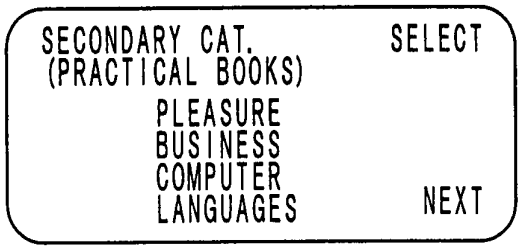


FIG. 13d

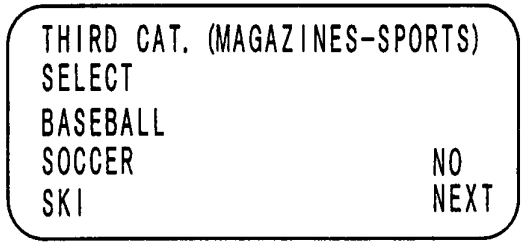


FIG. 13e

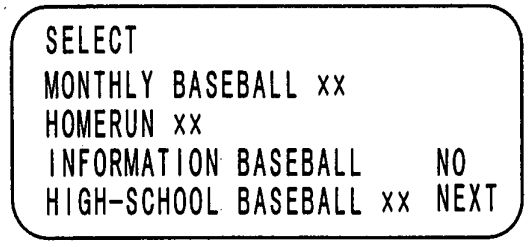


FIG. 13f

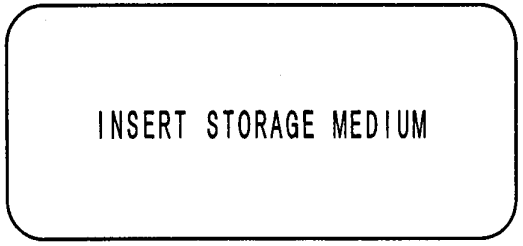


FIG. 13g

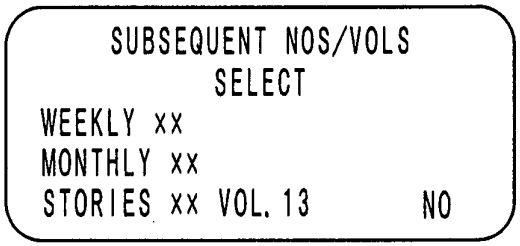


FIG. 13h

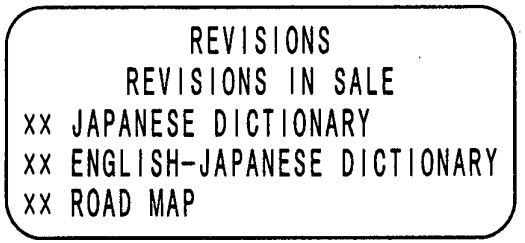


FIG. 13i

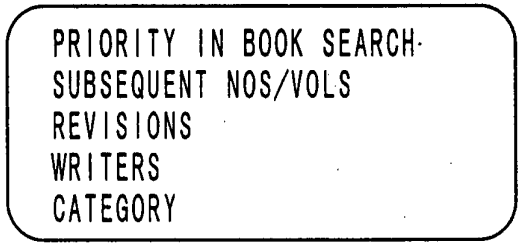


FIG. 13j

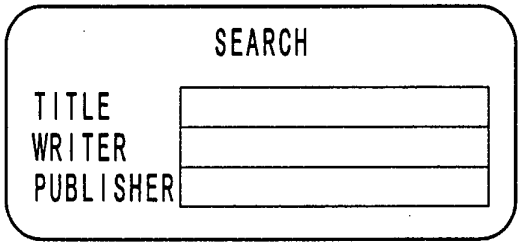


FIG. 13k

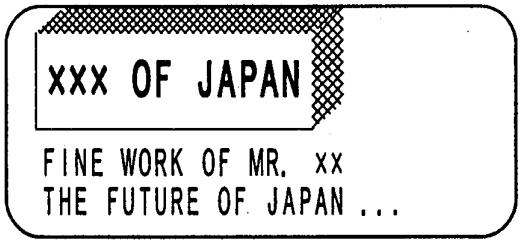


FIG. 13l

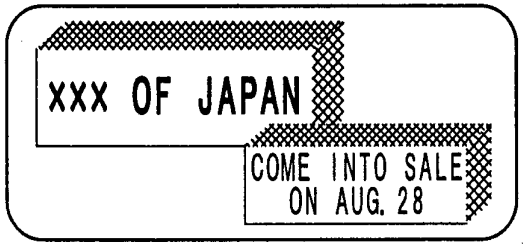
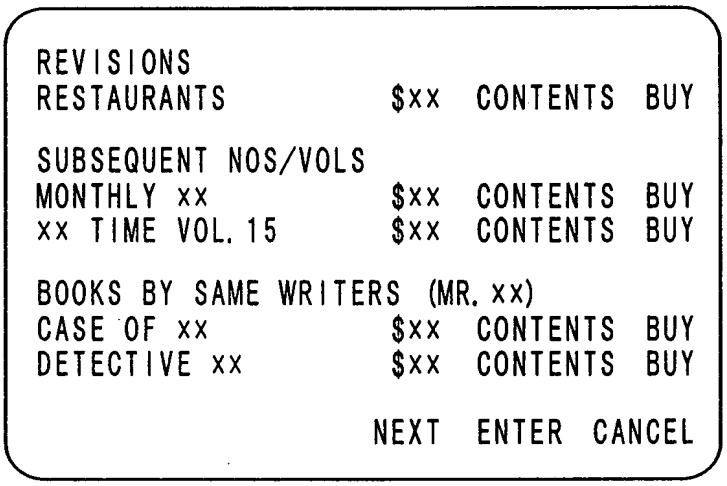


FIG. 13m



5,301,350 - 5,305,389